

REMARKS

The Amendments

Claims 36, 48, 52, 56, and 57 have been amended. No new matter is added by any of the amendments to the claims.

Preliminary Remarks

Before discussing the grounds of rejection set forth in the Official Action and the manner in which the Applicant's claimed apparatus and method distinguish over the cited references, a brief review of the Applicant's claimed apparatus and method will be presented.

The Applicant's claimed apparatus and method, as now defined in the amended independent Claims 36, 48, 52, 56 and 57, relates to an amusement ride assembly for providing passengers with an adrenalin-rush ride. The novel configuration of the Applicant's claimed amusement ride assembly includes a rotatable endless loop cable that is suspended between two or more stations, which may in large scale applications be more than 1km apart. The loop cable operates as both the ride cable and retrieval means, and therefore, the ride assembly does not require a separate retrieval cable. The passenger carrier includes roller wheels that are engaged with the loop cable so that the passenger can roll freely and accelerate along the loop cable under the pull of gravity after initial release from a station. The passenger carrier also includes a clamping mechanism and an **electronic control system** that actuates the clamping mechanism to fix the passenger carrier to the loop cable when the carrier slows down after its free roll. The loop cable can then be rotated to thereby retrieve the passenger carrier at or toward the stations for unloading or another free-roll ride.

As described in the specification, this unique configuration allows a mixture of ride configurations to be offered, each varying in duration and speed. In addition, the amusement ride can be arranged to include a number of cascaded stages and/or two passenger carriers can be operated simultaneously on opposite sides of the loop cable in particular embodiments. The single loop cable, operating as both the ride and retrieval cable, also offers commercial and economic benefits compared to other rides that require a separate retrieval cable in addition to the ride cable.

The Electronic Control System Feature

The Applicant's claimed amusement ride assembly as set forth in Claims 36, 52, 56 and 57 includes an electronic control system that is arranged to actuate the clamping mechanism. The electronic control system is operable in various modes of operation of the ride assembly, including:

- Automatic operation according to preset programmed ride settings (automatic mode), or
- Manual operation by an operator located remote from the passenger carrier, such as at an end station for example, via a radio link or the like (manual mode), or
- Dual-mode operation in which both an automatic mode or a manual mode is operable and which is switchable between the two modes.

For safety reasons, the Applicant's amusement ride assembly does not allow the passengers riding in the passenger carrier to operate the clamping mechanism, because operation of the clamping mechanism by an inexperienced passenger while the carrier is speeding along the cable could be dangerous. The electronic control system ensures that the clamping mechanism is operated correctly either automatically according to preset ride settings or manually by an experienced operator located in the station, for example.

The electronic control system feature of the Applicant's claimed amusement ride assembly enables a safe and enjoyable adrenalin-rush ride to be provided to the passengers. The passengers can sit back and enjoy the ride and need not be concerned about operations of the clamping mechanism, as this is taken care of for them. In addition, possible dangerous passenger interference with operation of the clamping mechanism is avoided with actuation being controlled by the electronic control system.

35 USC 102(b): Claims 36, 37, 39, 41, 42, 44, 46-53, and 55-58

The Examiner rejected Claims 36, 37, 39, 41, 42, 44, 46-53, and 55-58 as being anticipated by US 5,121,695 (Feuz). In making the rejection the Examiner apparently concluded that every component of the Applicants' claimed amusement ride assembly is described in Feuz and that the apparatus described and shown in Feuz inherently performs the functions provided by the Applicants' claimed ride assembly.

Feuz shows and describes an overhead cableway having (i) a cable that revolves between stations and (ii) transport devices having travelling gears with retractable clamps by means of which the transport devices can be connected to or disconnected from the cable. Travel segments are provided at every station for accelerating and decelerating the transport devices. As one of the transport devices nears a station, rollers on the travelling gear are guided onto an uncoupling rail of an unloading segment which in turn opens the cable clamp. The transport device is then guided onto a series of friction wheels arranged in line and rotating at speeds which cause the transport device to decelerate as it nears the station. Passengers are unloaded and the transport device is then guided onto a transfer rail to turn the device around and towards a similar return set of accelerating friction wheels.

The Applicants submit that the amusement ride assembly and method as now defined by the independent claims is novel relative to Feuz. Feuz does not teach, suggest, or disclose an amusement ride having a passenger carrier that includes a roller mechanism with **rollers that are rotatably engaged with the cable** to enable the passenger carrier to free-roll along the cable as set forth in Claims 36, 52, 56, and 57.

Feuz describes and shows a conventional chairlift system in which chairs (50) for carrying a passenger are clamped (52) to a transport cable (2) spanning between end stations. The chairs (50) move in concert with the cable between the loading and unloading stations. Because the chairs (50) are clamped to the cable (2) between stations, the chairs (50) do not and cannot roll freely along the cable under the pull of gravity.

Referring to Figures 3 and 4 of Feuz, the chairs (50) do not comprise “**a roller mechanism having rollers that are rotatably engaged with the cable**” like the Applicants’ claimed amusement ride as set forth in Claims 36, 52, 56, and 57. The chair in the Feuz chairlift mechanism is engaged or coupled to the cable (2) only by means of the clamp (52). Referring to Figures 1, 3, and 4 of Feuz, the chairs (50) and end station of the chairlift system comprise various rollers, but those are arranged to cooperate with uncoupling and transfer rails (24, 26) to open the clamp (52) and decouple the chairs (50) from the cable (2), respectively, for subsequent transportation within the station via rolling on a series of roller wheels (6, 8, 10) in the station.

The Examiner’s assertion that the rollers (66) of the Feuz chair somehow enable the chairs (50) to free-roll along the cable (2) is clearly erroneous. The rollers (66) of the Feuz chair do not engage with the cable (2), and they do not engage with wheels (6 and 8) in the transfer station. The rollers (66) on the Feuz passenger carrier are activation wheels that engage with an uncoupling rail (26) in the station to thereby cause the clamp (52) to disengage from the cable thereby decoupling the chair from the cable. The Feuz chair (50) has a running rail (80) that engages with the wheels (6, 8) as the chair is uncoupled from the cable in the station. Those wheels (6, 8) support the chairlift as it rides on them by of the rail (80) in the station.

Regarding the Applicant’s claimed method as set forth in Claim 48, Feuz does not disclose an operating process that includes a step corresponding to step (b) of the Applicant’s claimed method, namely, “**allowing the passenger carrier to free-roll under gravity along a span of a cable loop from a position at or toward one station, toward another station.**” The chairlift apparatus described in Feuz is not capable of performing that function because the chair (50) is clamped to the cable (2) at all times between stations. None of the rollers on the Feuz chair contact the cable at any point in a manner that permits the chair to roll freely on the cable under the influence of gravity between stations.

For all of the foregoing reasons, it is believed that the Applicant’s claimed amusement ride assembly as set forth in Claims 36, 52, 56, and 57 is novel relative to the apparatus described in Feuz. It is further believed that the Applicant’s claimed method of providing an

amusement ride as set forth in Claim 48 is novel relative to the operation of the device described in Feuz. Therefore, Claims 36, 48, 52, 56, and 57 are novel relative to Feuz.

Claims 37, 39, 41, 42, 44, 46, 47, and 58 depend from Claim 36 either directly or indirectly and thus, include all of the features of Claim 36. Therefore, Claims 37, 39, 41, 42, 44, 46, 47, and 58 are novel for at least the same reasons as Claim 36.

Claims 49-51 depend from Claim 48 either directly or indirectly and thus, include all of the features of Claim 48. Therefore, Claims 49-51 are allowable for at least the same reasons as Claim 48.

Claims 53 and 55 depend from Claim 52 either directly or indirectly and thus, include all of the features of Claim 52. Therefore, Claims 53 and 55 are allowable for at least the same reasons as Claim 52.

35 USC 103(a): Claim 40

The Examiner rejected Claim 40 under 35 USC 103(a) as being unpatentable over Feuz as applied to Claim 36 and further in view of US 4,003,314 (Pearson). Claim 40 depends from Claim 36 and thus, includes all of the features of the Applicant's claimed amusement ride assembly as set forth in Claim 36. For the reasons discussed above, it should now be clear that Feuz does not describe all of the features of the Applicant's claimed ride assembly as set forth in Claim 36. Pearson relates to a ski lift monitoring system. None of the ski lifts described in Pearson has the features of the Applicant's claimed amusement ride assembly that are missing from the apparatus described in Feuz. Therefore, even if the teachings of Feuz and Pearson could somehow be combined, the resulting combination would not have all of the features of the Applicant's claimed ride assembly as set forth in Claim 40. Accordingly, Claim 40 is believed to be allowable over the proposed combination of Feuz and Pearson.

35 USC 103(a): Claim 59

The Examiner rejected Claim 59 under 35 USC 103(a) as being unpatentable over Feuz as applied to Claim 36 and further in view of US 5,931,416 (Carpenter). Claim 59 depends from

Claim 36 and thus, includes all of the features of the Applicant's claimed amusement ride assembly as set forth in Claim 36. For the reasons discussed above, it should now be clear that Feuz does not describe all of the features of the Applicant's claimed ride assembly as set forth in Claim 36. Carpenter relates to a tethered aircraft that includes a remote control feature. However, Carpenter does not show or describe the features of the Applicant's claimed amusement ride assembly that are missing from the apparatus described in Feuz. Therefore, even if the teachings of Feuz and Carpenter could somehow be combined, the resulting combination would not have all of the features of the Applicant's claimed ride assembly as set forth in Claim 59. Accordingly, Claim 59 is believed to be allowable over the proposed combination of Feuz and Carpenter.

35 USC 103(a): Claim 60

The Examiner rejected Claim 60 under 35 USC 103(a) as being unpatentable over Feuz and Carpenter as applied to Claim 59 and further in view of US 4,049,999 (Thibaudon). Claim 60 depends from Claim 36 indirectly through Claim 59 and thus, includes all of the features of the Applicant's claimed amusement ride assembly as set forth in Claim 36. For the reasons discussed above, it should now be clear that Feuz and Carpenter even when considered together do not describe all of the features of the Applicant's claimed ride assembly as set forth in Claim 36. Thibaudon relates to a system for controlling the speed of operation of a chairlift. Thibaudon does not show or describe the features of the Applicant's claimed amusement ride assembly that are missing from the apparatus described in Feuz, the apparatus described in Carpenter, or any possible combination of those references. Therefore, even if the teachings of Thibaudon could somehow be combined with the disclosures of Feuz and Carpenter, the resulting combination would not have all of the features of the Applicant's claimed ride assembly as set forth in Claim 36. It is further noted that Thibaudon does not describe or suggest the actuation of a clamping mechanism on the chair of a chairlift for the purpose of speed control. The speed control system described in Thibaudon controls the speed of the motor that drives the chairlift system. Therefore, Thibaudon is completely irrelevant to the novelty or nonobviousness of the Applicant's claimed amusement ride as set forth in Claim 60. Accordingly, Claim 60 is believed to be allowable over the proposed combination of Feuz, Carpenter, and Thibaudon.

35 USC 103(a): Claim 61

The Examiner rejected Claim 61 under 35 USC 103(a) as being unpatentable over Feuz as applied to Claim 36 and further in view of Thibaudon. Claim 61 depends from Claim 36 and thus, includes all of the features of the Applicant's claimed amusement ride assembly as set forth in Claim 36. For the reasons discussed above, it should now be clear that Feuz and Thibaudon, even when considered together, do not describe or suggest all of the features of the Applicant's claimed ride assembly as set forth in Claim 36. Thibaudon relates to a system for controlling the speed of operation of a chairlift. Thibaudon does not show or describe the features of the Applicant's claimed amusement ride assembly that are missing from the apparatus described in Feuz. Therefore, even if the teachings of Thibaudon could somehow be combined with the disclosure of Feuz, the resulting combination would not have all of the features of the Applicant's claimed amusement ride assembly as set forth in Claim 36. It is further noted that Thibaudon does not describe or suggest the actuation of a clamping mechanism on the chair of a chairlift for the purpose of speed control. The speed control system described in Thibaudon controls the speed of the motor that drives the chairlift system. Therefore, Thibaudon is completely irrelevant to the Applicant's claimed amusement ride as set forth in Claim 61. Accordingly, Claim 61 is believed to be allowable over the proposed combination of Feuz and Thibaudon.

CONCLUSION

In view of the foregoing amendments and remarks, it is believed that the claims pending in this application are in condition for allowance. The Applicants respectfully request that the Examiner reconsider and withdraw the rejections of the claims.

Respectfully submitted,
DANN, DORFMAN, HERRELL AND SKILLMAN
A Professional Corporation
Attorneys for Applicant

By 

VINCENT T. PACE
PTO Registration No. 31,049

Tel.: 215-563-4100
Fax: 215-563-4044
e-mail: vpace@ddhs.com